## DRAWINGS AND PERFORMANCE DATA

FIG. 1 Wavelet Tiling of an N-Point Digital t-f Space

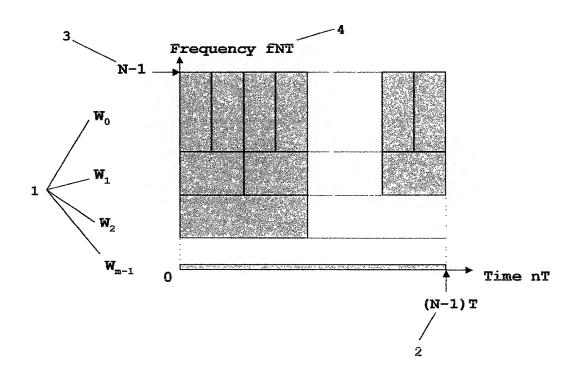
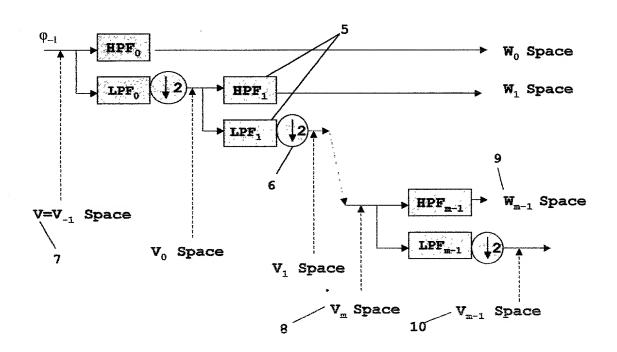
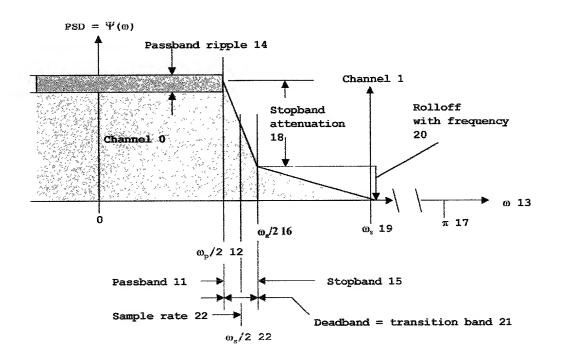


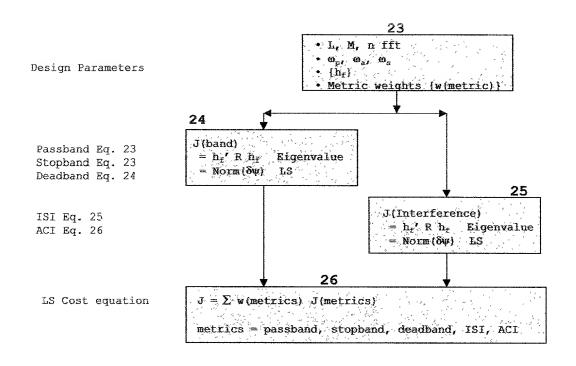
FIG. 2 Wavelet Iterated Filter Bank for Tiling t-f Space in FIG. 1



## FIG. 3 PSD Requirements for Communications



## FIG. 4 LS Metrics and Cost Function



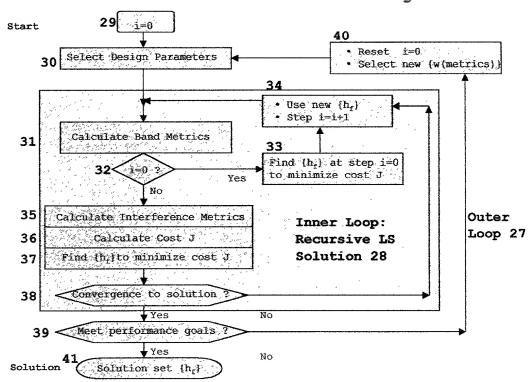
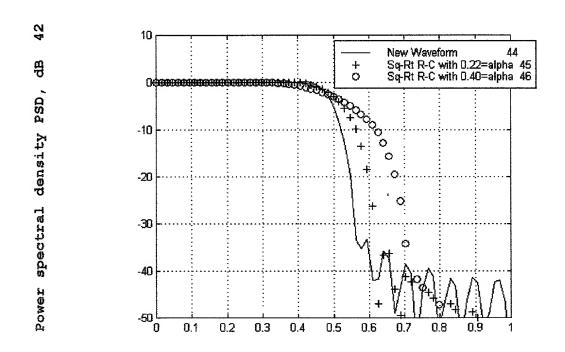


FIG. 5 LS Recursive Solution Algorithm

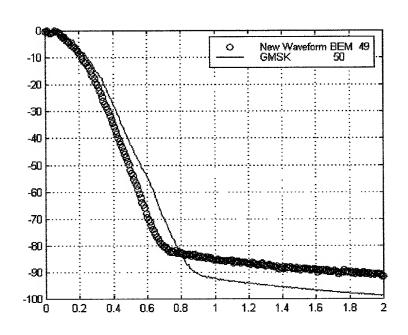
FIG. 6 PSD for New Waveform and Square-Root Raised-Cosine



Normalized frequency, symbol rate 43

Power spectral density PSD,

FIG. 7 PSD for New Waveform BEM and GMSK



Normalized frequency, bit rate 48

FIG. 8 Radar Ambiguity Functions of New Waveform and Unweighted Chirp Waveform

